

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In the application of:

Masayuki TSUTSUMI et al.

Serial No.: 10/584,398

Filing Date: July 5, 2007

For: POLYIMIDE FILM

Examiner: Shane Fang

Group Art Unit: 1796

Confirmation No. 9225

**RESPONSE TO NOTIFICATION OF  
NON-COMPLAINT APPEAL BRIEF**

MS Appeal Brief – Patent  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Non-Compliant Appeal Brief dated August 6, 2010, please substitute the following for the non-compliant Summary of Claimed Subject Matter in the brief filed July 23, 2010.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

Three independent claims, each defining the invention somewhat differently, are on appeal. The specification references are to the Substitute Specification filed June 23, 2006.

Independent claim 1 is directed to a polyimide film obtained by reacting an aromatic diamine having a benzoxazole structure (page 10, line 26-page 13, line 18) with an aromatic tetracarboxylic acid anhydride. (Page 3, lines 27-28; page 13, line 20-page 15, line 8). This film has a planar orientation coefficient of 0.79-0.89 as measured by an X-ray diffraction method and a dielectric constant of 2.7-3.1 at 100 GHz as measured by a cavity resonance perturbation method. Page 3, lines 29-32; page 4, lines 2-5.

Independent claim 5 is directed to a polyimide film obtained by reacting an aromatic diamine having a benzoxazole structure (page 10, line 26-page 13, line 18) with an aromatic tetracarboxylic acid anhydride (page 13, line 20-page 15, line 8) to produce a polyamide acid solution (page 18, line 22-page 19, line 16), drying the polyamic acid solution to produce a self-supporting green polyamide acid film (page 20, line 35-page 22, line 5), passing the green film through a nitrogen purged continuous type heat treatment furnace to heat the green film to carry out an imidation reaction (page 22, line 8-page 24, line 17) and cooling the produced film to room temperature to give the polyimide film (page 47, lines 13-17). This film is characterized by the property such that the amount of water vaporized from the film during heating at 500°C for 10 sec immediately after the helium purge at 170°C for 7 min and preliminary drying is not more than 5000 ppm (page 4, lines 9-13; page 29, line 26-page 30, line 26).

Independent claim 7 is directed to a polyimide film obtained by reacting an aromatic diamine having a benzoxazole structure (page 10, line 26-page 13, line 18) with an aromatic tetracarboxylic acid anhydride (page 13, line 20-page 15, line 8), wherein the absolute value of the difference between a surface planar orientation degree of one surface (surface A) and a surface planar orientation degree of the other surface (surface B) of the film is 0-2. Page 4, lines 25-30.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, appellants petition

for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to

**Deposit Account No. 03-1952**, referencing docket no. 358362011300.

Respectfully submitted,

Dated: September 1, 2010

By:



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